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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,932	05/26/2005	Sten Edstrom	G61-029	6877
21706	7590	07/06/2007	EXAMINER	
NOTARO AND MICHALOS			HOOK, JAMES F	
100 DUTCH HILL ROAD			ART UNIT	
SUITE 110			PAPER NUMBER	
ORANGEBURG, NY 10962-2100			3754	
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			07/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/517,932	Applicant(s) EDSTROM, STEN	
	Examiner James F. Hook	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over NL 8,204,847 (from now on referred to as 847) in view of Gilleland. The 847 reference discloses the recited method for improving the inner walls of pipes 2 through spraying a fluid coating material towards the inner wall of the pipe, at least one material piece is divided in the longitudinal direction and held together under pretension through means, to a pipe piece with an outer diameter less than the inner diameter of the pipe, where the material piece is introduced before the spraying step to a location that requires improvement or repair, where the means holding the material piece can be broken and can be considered to be a very thin material piece. The 847 reference discloses all of the recited structure with the exception of the material piece releasing potential energy under pretension and bear against the inner wall. The patent to Gilleland discloses the recited sleeve 12 provided in a pipe to be repaired, where the sleeve 12 is held in a collapsed state will open under pretension to bear against the wall. It would have been obvious to one skilled in the art to modify the material piece in 847 to allow it to utilize the inherent release of potential energy as the material expands to bear against the wall to be repaired as suggested by Gilleland where such would

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insure the material would achieve adequate contact with the pipe wall being repaired thereby saving time and money. It is considered an obvious choice of mechanical expedients to form the material of any thickness as such would only require routine experimentation to arrive at optimum values.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over 847 in view of Gilleland as applied to claims 1-10 and 18 above, and further in view of Kohichiro (SE 458950). The 847 reference as modified discloses all of the recited structure with the exception of placing the material opposite to a branch of a T of the pipe, specifically having a large enough space between longitudinal edges of the sleeve to allow such to be placed opposite to a T branch. The reference to Kohichiro discloses that it is old and well known in the art to provide repair sleeves with longitudinal slits that are spaced apart. It is considered merely intended use to place the sleeve across from a T branch of a pipe, and it would have been obvious to one skilled in the art to place the sleeve anywhere, including opposite to the T branch of a pipe by modifying the sleeve in 847 as modified to have a gap between longitudinal edges as suggested by Kohichiro where such would prevent the blockage of the branch pipe when attempting to repair a portion of a pipe that was damaged opposite to the branch opening.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over 847 in view of Gilleland and Kohichiro as applied to claim 11, and further in view of Jansson (SE 343357). The 847 reference as modified discloses all of the recited structure with the exception of using easily breakable ribbons to hold the material sleeve closed. The reference to Jansson discloses that it is old and well known to provide a collapsed

repair sleeve 2 with an easily breakable ribbon 7 to hold such in the collapsed state. It would have been obvious to modify the closing means in 847 as modified to be an easily breakable ribbon as such is an equivalent structure used to hold sleeves in collapsed condition as suggested by Jansson where such would insure easier breaking and deployment of the repair material thereby saving installation costs.

Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over 847 in view of Gilleland, Kohichiro, and Jansson as applied to claim 12, and further in view of Edstrom (SE 504663). The 847 reference as modified discloses all of the recited structure with the exception of disclosing the specific coating material being used. The reference to Edstrom discloses that it is old and well known in the art to provide a coating material which would include glass flakes in a polyester material or fire proof paint formed with mineral wool. It would have been obvious to one skilled in the art to modify 847 as modified by using a coating material containing mineral wool, or polyester material with glass flakes as the spray material used to coat insides of pipes as suggested by Edstrom where such is an equivalent spray material used to coat pipes and would provide added protection thereby lengthening the life of the pipe. The specific use of the pipe is considered merely intended use, where the pipe lining method of 847 could be utilized in any pipe, and the size of the hole is considered to be merely a choice of mechanical expedients where one skilled in the art would only require routine experimentation to arrive at optimum values for the materials used to cover any sized hole.

Response to Arguments

Applicant's arguments filed March 27, 2007 have been fully considered but they are not persuasive. With respect to the NL 847 reference, with regards to a substantial hole, such is merely intended use where the article of the 847 reference is capable of covering any sized hole, and without specific dimension of a hole, any defect could be considered substantial as such is merely a subjective word. With respect to the claim language only one hole needs to be present so any argument directed at area coverage or inability to cover multiple holes is not persuasive, where the sleeve of the 847 reference is capable of covering a hole, where it is also noted that the claim language offers as an alternative reconditioning a pipe which would suggest a less than substantial hole was being covered by the patch. With respect to the argument that the final structure of the fabric sleeve with the coating material of the NL 847 reference would not form an auxiliary wall, such is not persuasive where the final finished application of the patch in the 847 reference would inherently provide a new inner surface which is an auxiliary wall. The NL 847 reference teaches the feature of coating the fabric sleeve after it has been applied to the wall and therefore is teaching the spraying of a coating material onto the wall so that the fabric patch and the coating material create the auxiliary wall structure which together patches or reconditions the inside of the pipe. With respect to the arguments directed at Gilleland, there is no claim language that sets forth support for the argument that the reference needs to teach "spraying of coating material inside the rolled pipe to rupture the wrapping" when the specification and claims set forth that a bladder causes the rupture of the wrapping, and Gilleland teaches this feature. With respect to the arguments directed at the

combination, Gilleland teaches a type of material used as a patch, whereas the Kohichiro reference is used to teach leaving a space or gap in the sleeve, which are mutually exclusive teachings of modification to the base reference. Using Gilleland to teach what type of material is used for the patch, and Kohichiro to define how the patch is shaped would not affect the combination or the use of the teachings of both, and it is not required that the two modifying references relate to one another when such are only required to relate to the base reference. Likewise, Jansson is being used to teach the modification of the type of holding means that the base reference is using and that such can be formed of a different shaped holding means. The same is also true of Edstrom where such is used to teach modification of the type of coating material that is being used on the patch of the 847 reference which is also mutually exclusive to other reference teachings where there is no specific argument directed as why Edstrom cannot be used to modify the coating material of the 847 reference.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

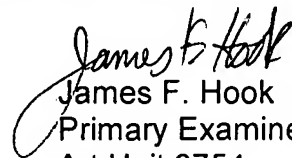
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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


James F. Hook
Primary Examiner
Art Unit 3754

JFH